

## Montana's Woody Biomass Projects-A Proven Return on Investment

The Fuels for Schools and Beyond Community Wood Energy Program is managed by the Forestry Division of the Montana Department of Natural Resources and Conservation. The program offers assistance for developing wood biomass energy projects (thermal, electric, and combined heat and power), including financial assistance for feasibility studies, engineering and equipment costs. Since its inception in 2003, more than 12,000 tons per year of woody biomass have been used displacing close to one million gallons of fuel oil, propane and natural gas saving approximately \$1 million per year. This has yielded a strong return on investment as \$3.7 million in federal grants have been invested in 13 projects in the state.

While the majority of the operating facilities are located in the heavily forested western third of the state, the program has conducted feasibility studies in southeastern Montana as well. Due to the low cost of natural gas at present, communities outside of natural gas distribution networks show the greatest opportunity to reduce heating and energy costs through installation of biomass systems.



Biomass materials can vary greatly and come from a variety of sources. Chips, pellets and cordwood are all being used as fuels in the facilities around the state. Darby School has created a Community Partnership that offers a tax break to local property owners who donate their forest thinnings to the school district for fuel. The formula is a win, win, win as the school saves money, the taxpayer saves money, and hazardous and unhealthy trees are removed from the forest and urban interface—reducing fire hazard and improving forest health. To learn more about the program and to learn whether your facility may be a good prospect for biomass integration go to the DNRC website [here](#), or contact Julie Kies at (406) 542-4280.

	Facility	Install Date	Type of Biomass Fuel Burned	Fossil Fuel Displaced	Estimated Annual Biomass Usage (Tons)	2009 Fuel Cost Savings	Boiler Heat Capacity (MMBTU)	Total Project Cost
1	Darby Public Schools	2003	chips	fuel oil	850	\$111,269	3	\$650,000
2	Victor Public Schools	2004	chips	natural gas	500	N/A	4.9	\$590,000
3	Thompson Falls Schools	2005	chips	fuel oil	400	\$31,703	1.6	\$455,000
4	Philipsburg Schools	2005	chips	natural gas	580	\$39,889	5.1	\$697,000
5	Glacier High School, Kalispell	2007	chips	natural gas	1,000	\$23,958	6	\$545,000
6	U of Montana - Western	2007	chips	natural gas	3,800	\$168,420	12	\$1,423,000
7	Townsend School District	2007	pellets	fuel oil, propane	250	\$22,443	0.68	\$425,000
9	Eureka Public Schools	2007	chips	fuel oil, propane	960	\$78,539	5	\$1,320,000
8	Troy Public Schools	2008	pellets	fuel oil	60	\$6,708	1	\$299,000
10	Deer Lodge Central Park Center	2009	chips	natural gas	730	N/A	1.5	\$797,000
11	DNRC Anaconda Unit Office	2011	cordwood	propane	20	N/A	0.3	\$36,000
12	Treasure State Correctional Training Center, Deerlodge	2012	cordwood	propane	120	Est. \$24,000	TBD	\$327,000
13	Clark Fork Valley Hospital, Plains	2012	pellets	propane	200	Est. \$26,000	2	\$334,000
14	Mineral Community Hospital, Superior	2012	pellets	fuel oil, propane	200	N/A	1	\$450,000

